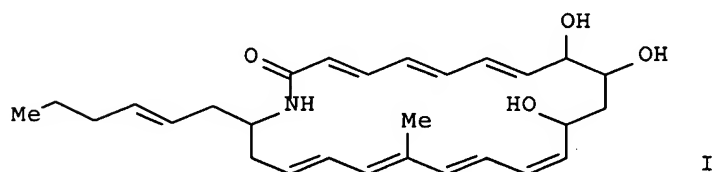


L5 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
 AN 2004:539718 CAPLUS Full-text
 DN 141:221406
 TI Aureoverticillactam, a novel 22-atom macrocyclic lactam from the marine actinomycete *Streptomyces aureoverticillatus*
 AU Mitchell, Scott S.; Nicholson, Benjamin; Teisan, Sy; Lam, Kin S.; Potts, Barbara C. M.
 CS Nereus Pharmaceuticals, Inc., San Diego, CA, 92121, USA
 SO Journal of Natural Products (2004), 67(8), 1400-1402
 CODEN: JNPRDF; ISSN: 0163-3864
 PB American Chemical Society
 DT Journal
 LA English
 GI



AB During the course of our screening program designed to discover novel anticancer and anti-infective agents from marine microorganisms, a strain of *S. aureoverticillatus* (NPS001583) isolated from a marine sediment was found to produce a novel macrocyclic lactam with cytotoxicity against various tumor cell lines. Using extensive MS, UV, and NMR spectral analyses, the structure has been established as (I), aureoverticillactam, a 22-atom macrocyclic lactam incorporating both triene and tetraene conjugated olefins.

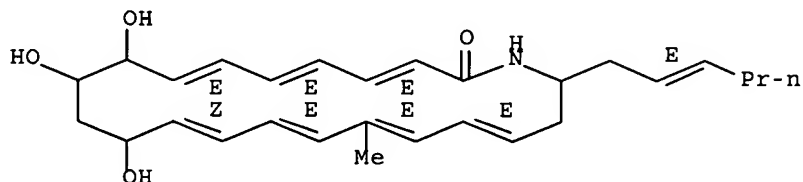
IT 682774-28-3P, Aureoverticillactam

RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation)
 (aureoverticillactam is a novel 22-atom macrocyclic lactam from the marine actinomycete *Streptomyces aureoverticillatus*)

RN 682774-28-3 CAPLUS

CN Azacyclodocosa-3,5,7,13,15,17,19-heptaen-2-one, 22-(2E)-2-hexenyl-9,10,12-trihydroxy-17-methyl-, (3E,5E,7E,13Z,15E,17E,19E)- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.



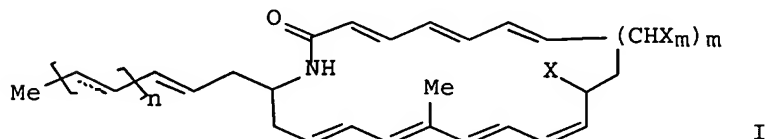
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STM
 AN 2004:354728 CAPLUS Full-text
 DN 140:357116
 TI Isolation and semisynthesis of macrocyclic lactams as anticancer agents
 IN Mitchell, Scott S.; Nicholson, Benjamin
 PA Nereus Pharmaceuticals, Inc., USA
 SO PCT Int. Appl., 36 pp.
 CODEN: PIXXD2

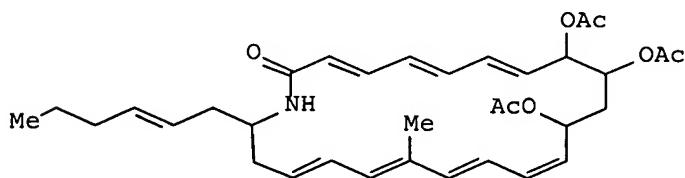
DT Patent
 LA English

FAN.CNT 1

| | PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------|--|------|----------|-----------------|----------|
| PI | WO 2004034970 | A2 | 20040429 | WO 2003-US30518 | 20030925 |
| | WO 2004034970 | A3 | 20041118 | | |
| | W: | | | | |
| | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW | | | | |
| | RW: | | | | |
| | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG | | | | |
| | US 2004132997 | A1 | 20040708 | US 2003-673036 | 20030925 |
| PRAI | US 2002-414817P | P | 20020927 | | |
| OS | MARPAT 140:357116 | | | | |
| GI | | | | | |



I



II

AB Antitumor compds. represented by formula I ($m = 2-4$; $n = 1-3$; $X = H, OH, OAc, NH_2, \text{halo, etc}$), acid-addition salts and pro-drugs are disclosed. These compds. were based on the structure of a macrocyclic lactam (II) isolated from cell culture of a marine organism (NPS1583). An acetyl derivative of II were prepared Compound II showed anti-tumor activity in an HT-29 assay with $EC_{50} = 0.2625 \mu\text{g/mL}$.

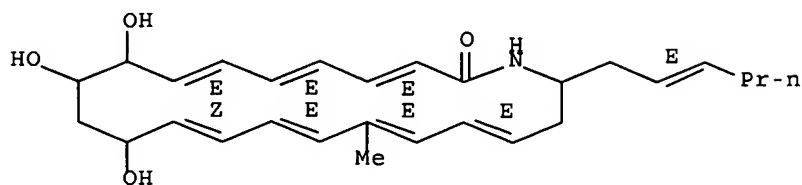
IT 682774-28-3P

RL: BPN (Biosynthetic preparation); PAC (Pharmacological activity); PUR (Purification or recovery); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses) (isolation and semisynthesis of macrocyclic lactams as anticancer agents)

RN 682774-28-3 CAPLUS

CN Azacyclodocosa-3,5,7,13,15,17,19-heptaen-2-one, 22-(2E)-2-hexenyl-9,10,12-trihydroxy-17-methyl-, (3E,5E,7E,13Z,15E,17E,19E)-(9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.



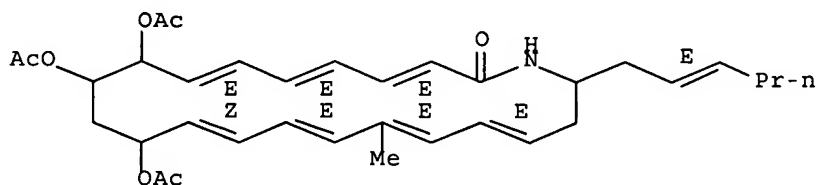
IT 682774-29-4P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (isolation and semisynthesis of macrocyclic lactams as anticancer agents)

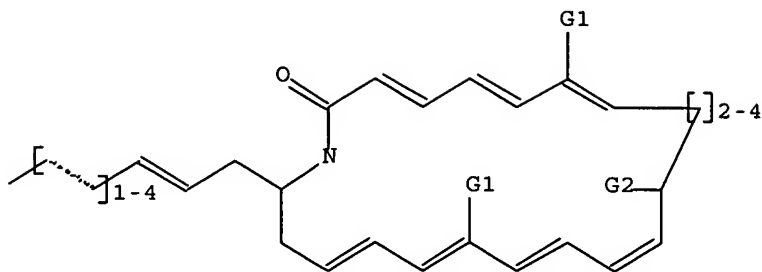
RN 682774-29-4 CAPLUS

CN Azacyclodocosa-3,5,7,13,15,17,19-heptaen-2-one, 9,10,12-tris(acetyloxy)-22-(2E)-2-hexenyl-17-methyl-, (3E,5E,7E,13Z,15E,17E,19E)- (9CI) (CA INDEX NAME)

Double bond geometry as described by E or Z.



=> d l2; d his; log y
 L2 HAS NO ANSWERS
 L1 STR



G1 C,H
 G2 H,O,N,X

Structure attributes must be viewed using STN Express query preparation.
 L2 QUE ABB=ON PLU=ON L1

(FILE 'REGISTRY' ENTERED AT 18:38:28 ON 26 MAY 2005)

DEL HIS Y
 L1 STRUCTURE UPLOADED
 L2 QUE L1
 L3 0 S L2
 L4 2 S L2 FUL

FILE 'CAPLUS' ENTERED AT 18:39:47 ON 26 MAY 2005

L5 2 S L4

FILE 'BEILSTEIN' ENTERED AT 18:40:24 ON 26 MAY 2005

L6 0 S L2
 L7 0 S L2 FUL

FILE 'MARPAT' ENTERED AT 18:40:53 ON 26 MAY 2005

L8 0 S L2
 L9 3 S L2 FUL
 L10 1 S L9/COM
 L11 0 S L10 NOT L5

| | | |
|--|------------|---------|
| COST IN U.S. DOLLARS | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| FULL ESTIMATED COST | 113.53 | 285.89 |
| DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) | SINCE FILE | TOTAL |
| | ENTRY | SESSION |
| CA SUBSCRIBER PRICE | 0.00 | -1.46 |

STN INTERNATIONAL LOGOFF AT 18:41:35 ON 26 MAY 2005